TABLE 3—NON-LOAD-BASED MISSING DATA PROCEDURE FOR NO_X-DILUENT CEMS AND NO_X CONCENTRATION CEMS

Trigger conditions		Calculation routines	
Monitor data availability (percent)	Duration (N) of CEMS outage (hours) [1]	Method	Lookback period
95 or more	N ≤24	Average	2,160 hours. *
	N >24	90th percentile	2,160 hours. *
90 or more, but below 95	N ≤8	Average	2,160 hours. *
	N >8	95th percentile	2,160 hours. *
80 or more, but below 90	N >0	Maximum value [3]	2,160 hours. *
Below 80, or operational bin indeterminable.	N >0	Maximum potential NO_X emission rate [2] or maximum potential NO_X concentration [2].	None.

* If operational bins are used, the lookback period is 2,160 quality-assured, monitor operating hours, and data at the corresponding operational bin are used to provide substitute data values. If operational bins are not used, the lookback period is the previous 2,160 quality-assured monitor operating hours. For units that report data only for the ozone season, include only quality-assured monitor operating hours within the ozone season in the lookback period. Use data from no earlier than three years prior to the missing data period.

[1] During unit operation.

[2] Alternatively, where a unit with add-on NO_X emission controls can demonstrate that the controls are operating properly, as provided in §75.34, the unit may report the greater of: (a) the maximum expected NO_X concentration, (or maximum controlled NO_X emission rate, as applicable); or (b) 1.25 times the maximum controlled value at the corresponding operational bin (if applicable), from the previous 2,160 quality-assured monitor operating hours.

[3] Where a unit with add-on NO_X emission controls can demonstrate that the controls are operating properly during the missing data period, as provided in §75.34, the unit may use the maximum controlled NO_X concentration or emission rate from the previous 2,160 quality-assured monitor operating hours. Units with add-on controls that report NO_X mass emissions on a year-round basis under subpart H of this part may use separate ozone season and non-ozone season data pools to provide substitute data values, as described in §75.34(a)(2).

TABLE 4—NON-LOAD-BASED MISSING DATA PROCEDURE FOR FLOW RATE CEMS

Trigger conditions		Calculation routines	
Monitor data availability (percent)	Duration (N) of CEMS outage (hours) [1]	Method	Lookback period
95 or more	N ≤24	Average	2160 hours*
	N >24	The greater of:	
		Average	HB/HA
		90th percentile	2160 hours*
90 or more, but below 95	N ≤8	Average	2160 hours*
	N >8	The greater of:	
		Average	
		95th percentile	
		HB/HA	
		2160 hours*.	
80 or more, but below 90	N >0	Maximum value	2160 hours*
Below 80, or operational bin indeterminable.	N >0	Maximum potential flow rate	None

* If operational bins are used, the lookback period is the previous 2,160 quality-assured, monitor operating hours and data at the corresponding operational bin are used to provide substitute data values. If operational bins are not used, the lookback period is the previous 2,160 quality-assured, monitor operating hours. For units that report data only for the ozone season, include only quality-assured monitor operating hours within the ozone season in the lookback period. Use data from no earlier than three years prior to the missing data period.

[1] During unit operation.

[58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26529, May 17, 1995; 61 FR 25582, May 22, 1996; 64 FR 28602, May 26, 1999; 67 FR 40434, June 12, 2002; 67 FR 53505, Aug. 16, 2002; 67 FR 57274, Sept. 9, 2002; 70 FR 28680, May 18, 2005; 73 FR 4346, Jan. 24, 2008; 76 FR 17311, Mar. 28, 2011]

§ 75.34 Units with add-on emission controls.

(a) The owner or operator of an affected unit equipped with add-on SO_2 and/or NO_X emission controls shall provide substitute data in accordance with paragraphs (a)(1), through (a)(5) of this section for each hour in which quality-assured data from the outlet SO_2 and/or NO_X monitoring system(s) are not obtained.

(1) The owner or operator may use the missing data substitution procedures specified in §§75.31 through 75.33

to provide substitute data for any missing data hour(s) in which the add-on emission controls are documented to be operating properly, as described in the quality assurance/quality control program for the unit, required by section 1 in appendix B of this part. To provide the necessary documentation, the owner or operator shall, for each missing data period, record parametric data to verify the proper operation of the SO_2 or NO_X add-on emission controls during each hour, as described in paragraph (d) of this section. For any missing data hour(s) in which such parametric data are either not provided or, if provided, do not demonstrate that proper operation of the SO_2 or NO_X add-on emission controls has been maintained, the owner or operator shall substitute (as applicable) the maximum potential NO_X concentration (MPC) as defined in section 2.1.2.1 of appendix A to this part, the maximum potential NO_X emission rate, as defined in §72.2 of this chapter, or the maximum potential concentration for SO_2, as defined by section 2.1.1.1. Alternatively, for SO_2 or NO_X, the owner or operator may substitute, if available, the hourly SO_2 or NO_X concentration recorded by a certified inlet monitor, in lieu of the MPC. For each hour in which data from an inlet monitor are reported, the owner or operator shall use a method of determination code (MODC) of ''22'' (see Table 4a in §75.57). In addition, under §75.64(c), the designated representative shall submit as part of each electronic quarterly report, a certification statement, verifying the proper operation of the SO_2 or NO_X add-on emission control for each missing data period in which the missing data procedures of §§75.31 through 75.33 were applied; or

(2) This paragraph, (a)(2), applies only to a unit which, as provided in §75.74(a) or §75.74(b)(1), reports NO_X mass emissions on a year-round basis under a state or Federal NO_X mass emissions reduction program that adopts the emissions monitoring provisions of this part. If the add-on NO_X emission controls installed on such a unit are operated only during the ozone season or are operated in a more efficient manner during the ozone season than outside the ozone season, the owner or operator may implement the missing data provisions of paragraph (a)(1) of this section in the following alternative manner:

(i) The historical, quality-assured NO_X emission rate or NO_X concentration data may be separated into two categories, i.e., data recorded inside the ozone season and data recorded outside the ozone season;

(ii) For the purposes of the missing data lookback periods described under §§75.33 (c)(1), (c)(2), (c)(3) and (c)(5) of this section, the substitute data values shall be taken from the appropriate database, depending on the date(s) and hour(s) of the missing data period. That is, if the missing data period occurs inside the ozone season, the ozone season data shall be used to provide substitute data. If the missing data period occurs outside the ozone season, data from outside the ozone season shall be used to provide substitute data.

(iii) A missing data period that begins outside the ozone season and continues into the ozone season shall be considered to be two separate missing data periods, one ending on April 30, hour 23, and the other beginning on May 1, hour 00;

(iv) For missing data hours outside the ozone season, the procedures of §75.33 may be applied unconditionally, i.e., documentation of the operational status of the emission controls is not required in order to apply the standard missing data routines.

(3) For each missing data hour in which the percent monitor data availability for SO_2 or NO_X, calculated in accordance with §75.32, is less than 90.0 percent and is greater than or equal to 80.0 percent; and parametric data establishes that the add-on emission controls were operating properly (*i.e.* within the range of operating parameters provided in the quality assurance/quality control program) during the hour, the owner or operator may:

(i) Replace the maximum SO_2 concentration recorded in the 720 quality-assured monitor operating hours immediately preceding the missing data period, with the maximum controlled SO2 concentration recorded in the previous 720 quality-assured monitor operating hours; or

(ii) Replace the maximum NO_X concentration(s) or NO_X emission rate(s) from the appropriate load bin(s) (based on a lookback through the 2,160 quality-assured monitor operating hours immediately preceding the missing data period), with the maximum controlled NO_X concentration(s) or emission rate(s) from the appropriate load bin(s) in the same 2,160 quality-assured monitor operating hour lookback period.

(4) The designated representative may petition the Administrator under §75.66 for approval of site-specific parametric monitoring procedure(s) for calculating substitute data for missing SO_2 pollutant concentration, NO_X pollutant concentration, and NO_X emission rate data in accordance with the requirements of paragraphs (b) and (c) of this section and appendix C to this part. The owner or operator shall record the data required in appendix C to this part, pursuant to §75.58(b).

(5) For each missing data hour in which the percent monitor data availability for SO_2 or NO_X, calculated in accordance with §75.32, is below 80.0 percent and parametric data establish that the add-on emission controls were operating properly (*i.e.* within the range of operating parameters provided in the quality assurance/quality control program),in lieu of reporting the maximum potential value, the owner or operator may substitute, as applicable, the greater of:

(i) The maximum expected SO_2 concentration or 1.25 times the maximum hourly controlled SO_2 concentration recorded in the previous 720 quality-assured monitor operating hours;

(ii) The maximum expected NO_X concentration or 1.25 times the maximum hourly controlled NO_X concentration recorded in the previous 2,160 quality-assured monitor operating hours at the corresponding unit load range or operational bin;

(iii) The maximum controlled hourly NO_X emission rate (MCR) or 1.25 times the maximum hourly controlled NO_X emission rate recorded in the previous 2,160 quality-assured monitor operating hours at the corresponding unit load range or operational bin;

(iv) For the purposes of implementing the missing data options in paragraphs (a)(5)(i) through (a)(5)(iii) of this section, the maximum expected SO_2 and NO_X concentrations shall be determined, respectively, according to sections 2.1.1.2 and 2.1.2.2 of appendix A to this part. The MCR shall be calculated according to the basic procedure described in section 2.1.2.1(b) of appendix A to this part, except that the words ''maximum potential NO_X emission rate (MER)'' shall be replaced with the words ''maximum controlled NO_X emission rate (MCR)'' and the NO_X MEC shall be used instead of the NO_X MPC.

(b) For an affected unit equipped with add-on SO_2 emission controls, the designated representative may petition the Administrator to approve a parametric monitoring procedure, as described in appendix C of this part, for calculating substitute SO_2 concentration data for missing data periods. The owner or operator shall use the procedures in §§75.31, 75.33, or 75.34(a) for providing substitute data for missing SO_2 concentration data unless a parametric monitoring procedure has been approved by the Administrator.

(1) Where the monitor data availability is 90.0 percent or more for an outlet SO_2 pollutant concentration monitor, the owner or operator may calculate substitute data using an approved parametric monitoring procedure.

(2) Where the monitor data availability for an outlet SO_2 pollutant concentration monitor is less than 90.0 percent, the owner or operator shall calculate substitute data using the procedures in §75.34(a) (1) or (2), even if the Administrator has approved a parametric monitoring procedure.

(c) For an affected unit with NO_X add-on emission controls, the designated representative may petition the Administrator to approve a parametric monitoring procedure, as described in appendix C of this part, in order to calculate substitute NO_X emission rate data for missing data periods. The owner or operator shall use the procedures in §75.31 or 75.33 for providing substitute data for missing NO_X emission rate data prior to receiving the Administrator's approval for a parametric monitoring procedure.

(1) Where monitor data availability for a NO_X continuous emission monitoring system is 90.0 percent or more, the owner or operator may calculate substitute data using an approved parametric monitoring procedure.

(2) Where monitor data availability for a NO_X continuous emission monitoring system is less than 90.0 percent, the owner or operator shall calculate substitute data using the procedure in §75.34(a) (1) or (2), even if the Administrator has approved a parametric monitoring procedure.

(d) In order to implement the options in paragraphs (a)(1), (a)(3) and (a)(5) of this section; and §§75.31(c)(3) and 75.72(c)(3), the owner or operator shall keep records of information as described in §75.58(b)(3) to verify the proper operation of all add-on SO_2 or NO_X emission controls, during all periods of SO_2 or NO_X emission missing data. If the owner or operator elects to implement the missing data option in paragraph (a)(2) of this section, the records in §75.58(b)(3) are required to be kept only for the ozone season. The owner or operator shall document in the quality assurance/quality control (QA/QC) program required by section 1 of appendix B to this part, the parameters monitored and (as applicable) the ranges and combinations of parameters that indicate proper operation of the controls. The owner or operator shall provide the information recorded under §75.58(b)(3) and the related QA/QC program information to the Administrator, to the EPA Regional Office, or to the appropriate State or local agency, upon request.

[60 FR 26567, May 17, 1995, as amended at 61 FR 59160, Nov. 20, 1996; 64 FR 28604, May 26, 1999; 67 FR 40438, June 12, 2002; 73 FR 4348, Jan. 24, 2008; 76 FR 17312, Mar. 28, 2011]

§75.35 Missing data procedures for CO_2.

(a) The owner or operator of a unit with a CO_2 continuous emission monitoring system for determining CO_2 mass emissions in accordance with §75.10 (or an O_2 monitor that is used to determine CO_2 concentration in accordance with appendix F to this part) shall substitute for missing CO_2 pollutant concentration data using the procedures of paragraphs (b) and (d) of this section.

(b) During the first 720 quality-assured monitor operating hours following initial certification at a particular unit or stack location (*i.e.*, the date and time at which quality-assured data begins to be recorded by a CEMS at that location), or (when implementing these procedures for a previously certified CO_2 monitoring system) during the 720 quality-assured monitor operating hours preceding implementation of the standard missing data procedures in paragraph (d) of this section, the owner or operator shall provide substitute CO_2 pollutant concentration data or substitute CO_2 data for heat input determination, as applicable, according to the procedures in §75.31(b).

(c) [Reserved]

(d) Upon completion of 720 quality-assured monitor operating hours using the initial missing data procedures of §75.31(b), the owner or operator shall provide substitute data for CO_2 concentration or substitute CO_2 data for heat input determination, as applicable, in accordance with the procedures in §75.33(b) except that the term ''CO_2 concentration'' shall apply rather than ''SO_2 concentration,'' the term ''CO_2 pollutant concentration monitor'' or ''CO_2 diluent monitor'' shall apply rather than ''SO_2 pollutant concentration monitor,'' and the term ''maximum potential CO_2 concentration, as defined in section 2.1.3.1 of appendix A to this part'' shall apply, rather than ''maximum potential SO_2 concentration.''

[67 FR 40439, June 12, 2002]

§75.36 Missing data procedures for heat input rate determinations.

(a) When hourly heat input rate is determined using a flow monitoring system and a diluent gas (O_2 or CO_2) monitor, substitute data must be provided to calculate the heat input whenever quality-assured data are unavailable from the flow monitor, the diluent gas monitor, or both. When flow rate data are unavailable, substitute flow rate data for the heat input rate calculation shall be provided according to §75.31 or §75.33, as applicable. When diluent gas